

Health Alert

February 10, 2003

HA#38 – Suspected/Confirmed Vaccinia
Adverse Reaction to Smallpox Vaccine:
Medical Response & Notification Procedures
2/10/03

**FROM: RICHARD C. DUNN
DIRECTOR**

**SUBJECT: Suspected/Confirmed Vaccinia Adverse Reaction (AR)
to Smallpox Vaccine: Medical Response and
Notification Procedures**

The Department of Health and Senior Services began vaccinating public health and medical staff on February 7, 2003. The United States military has been vaccinating reservists in Missouri since January 1, 2003. Therefore, we encourage you to distribute this information widely. Please contact the department if you have any questions at 1-800-392-0272.

Follow standard precautions for all patients who present with a suspected/confirmed adverse reaction (AR) to smallpox (vaccinia) vaccine. In addition, contact precautions should be utilized for patients with suspected/confirmed inadvertent inoculation (including patients with contact vaccinia), generalized vaccinia, eczema vaccinatum, progressive vaccinia, or fetal vaccinia.

The following known or suspected ARs are required to be reported to the local public health agency (LPHA) or the Missouri Department of Health and Senior Services (DHSS) within 24 hours (according to recently amended 19 CSR 20-20.020 (see <http://www.sos.state.mo.us/adrules/moreg/current/2003/v28n1/v28n1b.pdf>, page 36).

- Accidental administration
- Inadvertent inoculation
- Bacterial infection of site of inoculation
- Fetal vaccinia
- Contact vaccinia (i.e., vaccinia virus infection in a contact of a smallpox vaccinee)
- Eczema vaccinatum
- Erythema multiforme
- Generalized vaccinia
- Post-vaccinial encephalitis
- Progressive vaccinia (vaccinia necrosum, vaccinia gangrenosa, disseminated vaccinia)
- Vaccinia keratitis

Reports can be made through DHSS's Department Situation Room - which is staffed 24 hours a day, 7 days a week - at **800-392-0272**.

The LPHA where the vaccine was administered or DHSS (**800-392-0272**) can provide medical consultation. DHSS can provide specific consultation regarding collection/transportation of laboratory specimens (if laboratory testing for vaccinia and/or certain other infectious agents is necessary).

How to contact us:

Office of the Director
912 Wildwood
P.O. Box 570
Jefferson City, MO 65102
Telephone: (800) 392-0272
Fax: (573) 751-6041
Website: www.dhss.state.mo.us

If vaccinia immune globulin (VIG) is being considered as a treatment option, DHSS must be contacted. DHSS, along with physicians at the Centers for Disease Control and Prevention (CDC), will consult with the treating physician(s) about the advisability of VIG use. If CDC, which controls the civilian distribution of VIG, concurs that VIG is indicated, it will be shipped directly to the treating physician within 12 hours. This process is described in more detail below.

Obtaining digital pictures of affected skin areas/lesions can be especially useful in helping consulting physicians at DHSS and CDC provide the best input regarding the diagnosis, and the potential need for treatments such as VIG. If the facility does not have a digital camera available, DHSS can arrange for digital pictures to be taken by public health field staff.

Clinical information on the diagnosis and treatment of ARs is available from CDC. See especially:

Smallpox Vaccination and Adverse Reactions (<http://www.cdc.gov/mmwr/preview/mmwrhtml/di52cha1.htm>)

Smallpox Vaccination Overview for Clinicians (<http://www.bt.cdc.gov/agent/smallpox/vaccination/clinicians.asp#ae>)

Information from the State Public Health Laboratory (SPHL) on smallpox vaccination laboratory support is available at: http://www.dhss.state.mo.us/Lab/bt/smallpox_vaccine_support.htm.

Specific Procedures for Obtaining Medical Consultation and Requesting VIG

Patient presents with a suspected adverse reaction (AR) to smallpox (vaccinia) vaccine.

Physician contacts LPHA where patient received vaccine or DHSS at **800-392-0272**.

When LPHA is contacted, LPHA notifies DHSS senior epidemiology specialist; when DHSS is contacted, DHSS notifies LPHA.

Consultation is immediately arranged between attending physician and DHSS case lead (medical consultant/epidemiologist) coordinated through the DHSS Center for Emergency Response and Terrorism (CERT).

Determination is made by DHSS case lead as to whether patient needs to be seen by DHSS personnel or digital pictures need to be taken and transmitted to DHSS, Jefferson City, and CDC. DHSS will convey suggested procedure to the LPHA that administered the vaccine and the LPHA in the county in which the patient resides and coordinate staff response.

DHSS immediately contacts CDC if the reaction is highly suspicious for AR's reportable by VAERS, (i.e., eczema vaccinatum; erythema multiforme (including Stevens-Johnson syndrome); fetal vaccinia; generalized vaccinia; inadvertent inoculation; postvaccinial encephalitis; pyogenic superinfection; contact vaccinia; smallpox vaccination if contraindications present; and any AR causing hospitalization, permanent disability, life-threatening illness or death. DHSS case lead will notify attending physician concerning required reporting, including completion of CD1 and VAERS forms. (Attending physician initiates and assists DHSS case lead in filling out CD1 form.)

If CDC contacts physician in consultation with DHSS, DHSS case lead assists in determining appropriate diagnostic tests and/or treatment and communicates as needed with CERT.

Laboratory support is coordinated through the DHSS designated case lead with the Missouri State Public Health Laboratory (SPHL) and, if necessary, CDC. If VIG is indicated, CDC will inform

DHSS through the DHSS case lead. DHSS, through the case lead and CERT, will request the VIG through the Vendor-Managed Inventory (VMI) Program.

Immediately upon submitting a request for VIG or Cidofovir to CDC, DHSS, via CERT, will notify the LPHA at which the vaccine was administered and the LPHA in the county in which the patient resides.

VIG will be shipped from the VMI directly to the attending physician. DHSS designated case lead will follow up with physician to assure VIG was delivered and provide liaison with CERT and CDC. CERT will notify appropriate LPHA(s) of VIG delivery. DHSS, through the case lead, will facilitate Investigational New Drug (IND) forms completion.

Attending physician will administer VIG and provide follow-up care in consultation and coordination with DHSS designated case lead.

State Public Health Laboratory Sampling Procedures for Suspect Vaccinia Adverse Reactions

If the State Public Health Laboratory (SPHL) is contacted by a medical provider or facility regarding a patient with a suspected adverse reaction (AR) to smallpox (vaccinia) vaccine, SPHL will immediately notify CERT, which will initiate medical consultation procedures. If CERT and the attending physician feel a laboratory sample(s) is warranted, DHSS will provide the test kit. Sample(s) will be shipped back to SPHL via DHSS designated courier.

After receiving the specimen, SPHL can obtain preliminary results from Polymerase Chain Reaction (PCR) testing for vaccinia virus within five hours and notify the DHSS case lead. The case lead will notify the attending physician and the LPHA, and will continue to provide medical consultation as needed.

If the sample is preliminarily positive for vaccinia virus, it will be sent to CDC for confirmation by SPHL. CDC can confirm the results within 24 hours.

DHSS Vaccinia Adverse Reactions Investigation Procedures

See <http://www.dhss.state.mo.us/Publications/CDManual/Cdsec46.a.pdf> and <http://www.cdc.gov/mmWR/PDF/wk/mm5205.pdf>

DHSS DISTRIBUTION LIST: Missouri local public health agencies, state agencies and professional association groups

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